DOCUMENT RESUME

ED 246 400 CS 007 699

AUTHOR Fletcher, Sharon; Knaple, June D.
TITLE Nonsense Words versus Real Words in Teaching Phonics to High and Low Readers.
PUB DATE [81]
NOTE 8p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Aptitude; Grade 1; Grade 2; *Phonics; Primary Education; Reading Achievement; *Reading Instruction; *Reading Research; Reading Skills; Teaching Methods; *Word Recognition
IDENTIFIERS *Nonsense Words

ABSTRACT

A study examined high and low achieving readers' performance with six phonic generalizations, using real and nonsense words. Eighteen first and second grade students were divided into higher level and lower level readers on the basis of their scores on the Iowa Tests of Basic Skills. Three real words and four nonsense words for each of the six generalizations were chosen from a pretest. Each group of subjects received separately a 20-minute daily lesson in which the experimenter indicated which words following the phonic generalizations were real and which were not. A daily test of recognition was given immediately following each lesson. At the end of six days, a three-part posttest was administered to test sight recognition and forced-choice recognition. The results indicated that teaching lower reading level students using nonsense words was effective, contrary to the beliefs and practices of many elementary school teachers. The higher level readers were able to recognize significantly more words than lower level readers. Lower level readers recognized more nonsense words than real words, while the higher level readers were more successful with real words than with nonsense words. On the forced-choice recognition segment, all subjects did better with nonsense than with real words. (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Dr. June D. Knafle
Education
University of Illinois at Chicago
Box 4348
Chicago, Illinois 60680

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

June D. Knafle

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED246400

NONSENSE WORDS VERSUS REAL WORDS IN TEACHING PHONICS TO HIGH AND LOW READERS

Sharon Fletcher and June D. Knafle

University of Illinois at Chicago

Although researchers have considered questions concerning phonics, phonic generalizations, and methods of teaching phonics (e.g., Clymer, 1963; Bailey, 1967; Emans, 1967; Burmeister, 1968; Personke, 1972; Caldwell, Roth, & Turner, 1978; Rosso & Emans, 1981), the factor of student ability has not generally been one of the variables included in their investigations. This study investigated high versus low readers' ability to generalize from several phonic generalizations, and their retention of words taught according to the generalizations, with the use of real and nonsense words.

The question of whether to use nonsense words in teaching phonics seems to have a variety of opinions, ranging from one extreme to the other. Some

CS007999

teachers never use nonsense words because of their artificiality or because of a focus on meaningfulness at every level, while other teachers view a child's successful pronunciation of nonsense words as convincing proof that the child has really mastered the phonic generalizations. Another factor is the commonly held view that using nonsense words to teach phonics is too difficult for lower level readers. Examination of the most recent professional reading textbooks reveals that most authors do not even mention the use of nonsense words for teaching phonics. Some research using nonsense words as part of experimental and diagnostic tasks has been done (e.g., McNeil & Stone, 1965; Hillerich, 1967; Personke, 1972) and the results were generally favorable toward the usefullness of nonsense words, but the results seem to have been overlooked or ignored.

An experimental task was formulated to measure high versus low readers' performance with six phonic generalizations. The generalizations involving real and nonsense words were presented to high and low readers to measure transfer, sight recognition, and forced choice recognition.

METHOD

The phonic generalizations selected were chosen from those found by Clymer (1963) and Bailey (1967) to be of high utility. Eighteen first and second graders in the same class of a Chicago elementary school were administered a pre test consisting of real and nonsense words that followed the generalizations to be used. Any words that were identified on the individual test were discarded. From the unknown words of the pre test, three real words and four nonsense words for each of the six generalizations were chosen. Children were divided into higher level readers and lower level readers on the basis of scores on the Iowa Test of Basic Skills (.9 - 1.0 -- lower group; 2.0 - 3.0 -- higher group). The higher level group (n = 9) received patterns 1 - 3 of real words, while the

lower group (n = 9) received 1 - 3 nonsense patterns. The reverse procedure was followed for patterns 4 - 6.

The six generalizations used were 1) When c is followed by o, the sound of k is heard, 2) When c is followed by e, the sound of s is heard, 3) When y is the final letter, it has the vowel sound of e, 4) When there is one e in a word that ends with a consonant, the e usually has a short a sound, 5) When c is followed by a, the sound of k is heard, and 6) When c is followed by i, the sound of s is heard. The generalizations were taught in the following order: e, co, ca, ce, ci, and y. Each pattern contained seven words, three real words (taken from the Follet and Kottmeyer Spellers), three nonsense words, and one nonsense transfer word. For example, for the co pattern, real words were decode, collide, and decorate; nonsense words were becode, connide, and secorate; and the nonsense transfer word was combuck.

The children received a 20-minute lesson daily during the 10:00 - 11:00 hour. (The higher readers received their lesson while the lower group left the classroom for a reading activity. This procedure was then reversed.) The lessons were as follows: The experimenter pointed to words written on the blackboard that followed the generalization being taught and said, "These words are real words" or "These words are not real words." She pointed to each word and pronounced it. She then told the group to listen carefully to each word again, and the children repeated them. She asked the children to tell what sound was heard in all three words. After she stated the generalization, children (one at a time) came to the blackboard and pointed out the word that was pronounced. Children were then given flash cards with the words printed on them. The experimenter called out a word and the children held up the word that was called. The activity continued until all of the children responded. Flash cards

were collected and paper was given out. Children then read the words. The experimenter restated the generalization. Children then wrote the words from the board on the paper, circling the letters that made up the generalization. The papers were collected.

A daily test of recognition was administered immediately following each lesson. There was a final test (3-part post test) at the conclusion of the 6-day treatment. To test sight recognition and forced choice recognition, the post test consisted of all the words that were taught in the study. Nonsense words were used to test transfer - one nonsense word for each generalization. Each child was tested individually for transfer and sight recognition; children were then tested in their original groups for forced choice recognition. (Words were presented in pairs in a counterbalanced order.)

FINDINGS

Two-way analyses of variance with repeated measures on one factor were computed for correct responses for four variables (1 - Daily Forced Choice Recognition, 2 - Transfer, 3 - Sight Recognition, and 4 - Forced Choice Recognition). See Table 1 for means, standard deviations, and percentages of correct responses.

Daily Forced Choice Recognition: Significant differences were found for the interaction between word types ($F = 4.94$, $df = 1, 16$, $p < .05$), but not between groups nor word type. The higher level group was able to recognize more real words than nonsense words; however, the lower group was more successful with the nonsense words than real words.

Transfer: The lower level readers were more successful with the nonsense words, but the higher level readers were more successful with the real words. The interaction was significant at the .05 level ($F = 4.39$, $df = 1,16$). There

was no significant difference between groups nor between word type.

Sight Recognition: Significant differences between groups were found. The higher level readers were able to recognize significantly more words than the lower level readers ($F = 31.52$, $df = 1,16$, $p < .001$). The interaction between word type was significant at the .05 level ($F = 7.08$, $df = 1,16$). The lower level readers recognized more nonsense words than real words, but the higher level readers were more successful with real words than nonsense words.

Forced Choice Recognition: The analysis of variance for word type was significant at the .05 level ($F = 7.52$, $df = 1,16$). The higher and the lower level readers did significantly better with the recognition of nonsense words than real words. The interaction and group differences were not significant.

The Daily Forced Choice and Forced Choice Recognition Tests were very easy for the children and promoted high scores (94% - 100% correct). Transfer and Sight Recognition, however, were much harder tasks (30% - 85% correct).

DISCUSSION

This study revealed that teaching lower level students with the use of nonsense words was effective, a finding contrary to the beliefs and practices of many elementary teachers. (Teaching phonic generalizations with nonsense words is often viewed as being too difficult for lower readers.) Teachers may therefore be ignoring a potentially valuable technique. Another important implication from this study was that the difficulty of the task presented to the children was responsible for different performance levels. Forced Choice Recognition was very easy, with resulting high scores. The harder tasks, Transfer and Sight Recognition, were consequently more sensitive to the children's performance under the different treatments. Researchers would be wise to include different kinds of tasks to ensure adequate measurement of performance.

REFERENCES

Bailey, M. H. The utility of phonic generalizations in grades one through six. The Reading Teacher, 1967, 20, 413-418.

Burmeister, L. Usefulness of phonic generalizations. The Reading Teacher, 1968, 21, 349-356.

Caldwell, E. C, Roth, S. R., & Turner, R. R. A reconsideration of phonic generalizations. Journal of Reading Behavior, 1978, 10, 91-96.

Clymer, T. The utility of phonic generalizations in the primary grades. The Reading Teacher, 1963, 16, 252-258.

Emans, R. The usefulness of phonic generalizations above the primary grades. The Reading Teacher, 1967, 20, 419-425.

Hillerich, R. L. Vowel generalizations and first-grade achievement. Elementary School Journal, 1967, 67, 246-250.

McNeil, J. D., & Stone, J. Note on teaching children to hear separate sounds in spoken words. Journal of Educational Psychology, 1965, 56, 13-15.

Personke, C. R. The use of nonsense words to test generalization ability in spelling. Elementary English, 1972, 49, 1233-1239.

Rosso, B. R., & Emans, R. Children's use of phonic generalizations. The Reading Teacher, 1981, 34. 653-658.

Table 1

Percentages, Means, and Standard Deviations

of Correct Responses for All Tests

	LOW GROUP		HIGH GROUP	
	REAL	NONSENSE	REAL	NONSENSE
DAILY FORCED CHOICE				
% Correct	94%	98%	100%	98%
Mean (18)	17.33	17.67	18.00	17.89
S.D.	1.00	.50	0.00	.33
TRANSFER				
% Correct	30%	48%	70%	56%
Mean (3)	0.93	1.45	2.11	1.67
S.D.	0.93	.88	0.78	1.12
SIGHT RECOGNITION				
% Correct	30%	42%	85%	80%
Mean (9)	2.33	3.89	7.89	7.22
S.D.	2.23	2.00	1.76	1.56
FORCED CHOICE RECOGNITION				
% correct	99%	100%	97%	100%
Mean (18)	17.78	18.00	17.44	18.00
S.D.	0.44	0.00	0.73	0.00